United States of America

FEDERAL COMMUNICATIONS COMMISSION

AM BROADCAST STATION LICENSE

Authorizing Official:

Official Mailing Address:

WYPA, INC.
2401 N. HALSTED STREET
SUITE 200
CHICAGO IL 60614

Son Nguyen
Supervisory Engineer
Audio Division
Media Bureau

Grant Date: February 17, 2016

This license expires 3:00 a.m. local time, December 01, 2020.

Facility Id: 16849

Call Sign: WCPT

License File Number: BL-20151223BUO

This license covers permit no.: BP-20150730ABY

Subject to the provisions of the Communications Act of 1934, subsequent acts and treaties, and all regulations heretofore or hereafter made by this Commission, and further subject to the conditions set forth in this license, the licensee is hereby authorized to use and operate the radio transmitting apparatus herein described.

This license is issued on the licensee's representation that the statements contained in licensee's application are true and that the undertakings therein contained so far as they are consistent herewith, will be carried out in good faith. The licensee shall, during the term of this license, render such broadcasting service as will serve the public interest, convenience, or necessity to the full extent of the privileges herein conferred.

This license shall not vest in the licensee any right to operate the station nor any right in the use of the frequency designated in the license beyond the term hereof, nor in any other manner than authorized herein. Neither the license nor the right granted hereunder shall be assigned or otherwise transferred in violation of the Communications Act of 1934. This license is subject to the right of use or control by the Government of the United States conferred by Section 606 of the Communications Act of 1934.

Hours of Operation: Unlimited

Average hours of sunrise and sunset:
Local Standard Time (Non-Advanced)

Jan.	7:15 AM	4:45 PM	Jul.	4:30 AM	7:30 PM
Feb.	6:45 AM	5:30 PM	Aug.	5:00 AM	7:00 PM
Mar.	6:00 AM	6:00 PM	Sep.	5:30 AM	6:00 PM
Apr.	5:15 AM	6:30 PM	Oct.	6:00 AM	5:15 PM
May	4:30 AM	7:00 PM	Nov.	6:45 AM	4:30 PM
Jun.	4:15 AM	7:30 PM	Dec.	7:15 AM	4:15 PM

Callsign: WCPT License No.: BL-20151223BUO

Name of Licensee: WYPA, INC.

Station Location: WILLOW SPRINGS, IL

Frequency (kHz): 820

Station Class: B

Antenna Coordinates:

		Day				
Latitude:	N	41 Deg	58 Min	53 Sec		
Longitude:	W	87 Deg	46 Min	20 Sec		
		Night				
Latitude:	N	41 Deg	32 Min	30 Sec		
Longitude:	W	88 Deg	02 Min	03 Sec		

Transmitter(s): Type Accepted. See Sections 73.1660, 73.1665 and 73.1670 of the Commission's Rules.

Nominal Power (kW): Day: 5.8 Night: 1.5

Antenna Input Power (kW): Day: 5.8 Night: 1.62

Antenna Mode: Day: ND Night: DA

(DA=Directional Antenna, ND=Non-directional Antenna; CH=Critical Hours)

Current (amperes): Day: 17.25 Night: 5.69

Resistance (ohms): Day: 19.5 Night: 50

Non-Directional Antenna: Day

Radiator Height: 64 meters; 63 deg

Theoretical Efficiency: 282 mV/m/kw at 1km

Antenna Registration Number(s):

Day:

Tower No.	ASRN	Overall Height (m)
1	1023124	

Night:

Tower No.	ASRN	Overall Height (m)
1	1257923	
2	1257925	
3	1257926	
4	1257927	
5	1257928	
6	1257929	

DESCRIPTION OF DIRECTIONAL ANTENNA SYSTEM

Theoretical RMS (mV/m/km): Night: 369.5

Standard RMS (mV/m/km): Night: 388.2

Augmented RMS (mV/m/km):

Q Factor: Night:

Theoretical Parameters:

Night Directional Antenna:

Tower No.	Field Ratio	Phasing (Deg.)	Spacing (Deg.)	Orientation (Deg.)	Tower Ref Switch *	Height (Deg.)
1	0.4180	100.000	0.0000	0.000	0	87.0
2	1.0600	-2.500	93.2000	36.900	0	87.0
3	0.6440	-122.900	164.6000	37.200	0	87.0
4	0.3820	-138.600	327.4000	70.000	0	87.0
5	0.7830	-32.100	251.6000	81.000	0	87.0
6	0.4060	80.000	198.0000	98.500	0	87.0

* Tower Reference Switch
0 = Spacing and orientation from reference tower
1 = Spacing and orientation from previous tower

Night Directional Operation:

Twr. No.	Phase (Deg.)	Antenna Monitor Sample Current Ratio
1	100.5	0.397
2	0	1
3	-119.2	0.533
4	-130.3	0.341
5	-30.7	0.76
6	77.4	0.398

Antenna Monitor: POTOMAC INSTRUMENTS AM -1901

Sampling System Approved Under Section 73.68 of the Rules.

Special operating conditions or restrictions:

1 The permittee/licensee in coordination with other users of the site must reduce power or cease operation as necessary to protect persons having access to the site, tower or antenna from radiofrequency electromagnetic fields in excess of FCC guidelines.

Special operating conditions or restrictions:

2 Special operating hours: The station operates from sunrise at Chicago, Illinois to sunset at Grapevine, Texas pursuant to the time schedule specified on WYPS's license BR-604.
Jan. 7:15am to 5:45pm; Feb. 6:45am to 6:15 pm
Mar. 6:00am to 6:30pm; Apr. 5:15am to 7:00pm
May 4:30am to 7:15pm; Jun. 4:15am to 7:45pm
Jul. 4:30am to 7:45pm; Aug. 5:00am to 7:15pm
Sept. 5:30am to 6:30pm; Oct. 6:00am to 6:00pm
Nov. 6:45am to 5:30pm; Dec. 7:15am to 5:30pm

Special operating conditions or restrictions:

3 Day Ground System:
The ground system that now serves for diplex operation by WCPT and WSBC will remain unchanged. The series fed self-supporting radiator sits above the single story building atop 20 ft. stilt legs. The ground system consist of three primary components, plus an additional interior layer.

The first component consists of the station reference ground and is a grade embedded copper grid system encompassing the "rear yard area". This area spans an arc from about 330 to150 deg. T behind the building. The grid consists of #6 bare copper spaced in a 6" square grid to a distance of about 15-20 deg. at 820 kilohertz. Each grid cross point is tack brazed on silver soldered to achieve a uniform level of conduction.

The grid is wrapped in a perimeter copper strap with each grid element bonded to the strap. The grid system is earth bonded to the underlying soil by both primary 20 ft earthing electrodes at each tower leg and the electrical service entrance. 10 ft. electrodes spaced 20 ft. around the entire grid perimeter at the various property lines and the generator slab are also bonded to the grid and perimeter strap and further enhance earth coupling.

The grid is protected by a heavy landscaping tarp and 8" of crushed and leveled gravel.

Additionally, two 20 ft earthing electrodes are driven inside the building center spaced 20 ft. from each other and the tower legs. Both are bonded to the tower legs/station reference ground.

The second component is a cluster of 100 evenly splayed radials extended across the surface of the building roof filling in the span from 270 to 330 deg. T. The 100 ft. radials are terminated at each end into a 2" copper perimeter strap. The perimeter strap is then bonded through the roof deck at 15 ft. intervals to down leads which are then bonded to 10 ft. earthing electrodes staged around the building perimeter. The entire radial system is completely covered by the roofing membrane and protected.

The downleads are further bonded together by a perimeter 4" bonding strap inside the building, which then is bonded to the station reference ground bonding point and system at the tower base.

The third component consists of 30 #10 copper radial wires installed under the new parking lot from 150 to about 270 deg T. The radials are attached to the grid system by 4" copper strap and the strap extends along the building perimeter. The radials/strap are also bonded to interior 10ft. earthing electrodes spaced 15 ft. apart located inside the building as part of the roof radial system.

Additionally, the area directly under the tower on the roof consists of an identical section of grid to the rear yard grid system and is bonded to the roof radial system.

The interior layer is a steel hardware cloth screen wrapping the entire building envelop and creating an all encompassing Faraday cage. The windows and doors are also bonded to the screen system. This screen system is bonded to the roof radial down leads as well as by the same perimeter 4" bonding strap, which all then are bonded to the station reference ground nonding point and system near the tower base.

Special operating conditions or restrictions:

4 The licensee shall perform the measurements described in Section 73.155 at least once within each 24-month period.

*** END OF AUTHORIZATION ***